

REMARKS

Claims 16-21 and 24-27 remain in this application. Claims 16-27 are rejected. Claims 16-21, 24-27 are objected to. Claims 22 and 23 are cancelled herein. Claims 1-15 are previously cancelled. Claims 16-21 and 24-27 are amended herein to clarify the invention and to address matters of form unrelated to substantive patentability issues. For the convenience of the Examiner, APPENDIX I is provided herewith having a complete set of pending claims with all amendments effected therein.

The objected claims 16-21, 24-27 are amended as suggested by the Examiner. Withdrawal of the objection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 16-27 are rejected as indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention as a result of informalities stated in the Office Action. Claims 22 and 23 are cancelled the remaining claims are amended to remove or correct the informalities noted in the Office Action. Therefore, reconsideration of

the rejection of claims 16-21, and 24-27 and their allowance are earnestly requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102(b)

Claims 16-20 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Kiyoshi reference. Applicant herein respectfully traverses these rejections. “Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). It is respectfully submitted that the cited reference is deficient with regard to the following.

Independent claim 16 recites, in part:

means for calculating the mentation of the test subject based on the search response times measured by the time counter and the sequential order.

This limitation is not taught or suggested by the cited reference. The present invention is directed not only to displaying targets and measuring search response

times, but also calculating mentation of the test subject based on the measured search response times. The above limitation was also relied upon in the parent application directed to the method of the invention.

OBVIOUSNESS DOUBLE PATENTING

Claims 16-26 are rejected under the judicially created doctrine of the "obviousness" type double patenting rejection as unpatentable over claims of U.S. Patent No. 6,648,834.


With regard to the judicially created doctrine of the "obviousness" type double patenting rejection, applicant submits that the parent patent to this divisional application is not proper prior art because the Examiner issued a restriction requirement in the parent application directly applicable to the claims presently involved. With regard to divisional applications, 35 U.S.C. § 121 states that a "patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before issuance of the patent on the other application."

TIME EXTENSION REQUEST

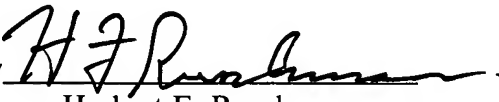
Applicant respectfully requests a one month extension of time for responding to the Office Action. Please charge the fee of \$55.00 for the extension of time to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
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APPENDIX I

ALL PENDING CLAIMS WITH AMENDMENTS EFFECTED THEREIN

1 - 15. (Cancelled)

16. (Currently Amended) A mentation test apparatus comprising:

a display means for displaying images by electronic control;

a transparent touch panel overlaid on a screen of the display means;

an image control means for randomly disposing and displaying a given number of targets to be pointed to in a prescribed order on the screen by controlling the display means, and for erasing the targets that have been pointed to in a correct order when a test subject points to the targets by pressing a position corresponding to each target on the touch panel in a prescribed order;

a time counter for measuring a search response time required by the test subject for searching each of the targets in a correct order and the search response time required by the test subject for searching the given number of targets in correct sequential order, and a processing means for calculating the mentation of the test subject based on the search response times measured by the time counter and the sequential order.

17. (Currently Amended) The mentation test apparatus according to Claim 16, wherein the image control means comprises a function for controlling the display means to display dummy targets at the positions where the targets have been erased or at random positions in place of the targets that have been erased.

18. (Currently Amended) The mentation test apparatus according to Claim 17, wherein the image control means comprises a function for controlling the display means to display the dummy targets being different in at least one of the color, shape and size in place of the targets that have been erased.

19. (Currently Amended) The mentation test apparatus according to any one of Claims 16 to 18, wherein the image control means comprises a function for controlling the display means to display marks indicating the sequential order of pointing as the targets or in addition to the targets, and for controlling the display means to display marks other than the marks that have been already displayed as dummy targets in place of the erased targets.

20. (Currently Amended) The mentation test apparatus according to any one of Claims 16 to 18 wherein the image control means comprises a function for controlling the display means to display each target that has not been pointed to yet

by changing a display position of the target every time the other targets have been pointed in a correct order.

21. (Currently Amended) A mentation test apparatus comprising:

a display means for displaying images by electronic control;

a transparent touch panel overlaid on a screen of the display means;

an image control means for randomly disposing and displaying a given number of targets to be pointed to in a prescribed order on the screen by controlling the display means, and for erasing the targets that have been pointed to in a correct order when a test subject points to the targets by pressing a position corresponding to each target on the touch panel in a prescribed order; and

a time counter for measuring a search response time required by the test subject for searching each of the targets in a correct order and the search response time required by the test subject for searching the given number of targets in correct sequential order, and a processing means for calculating the mentation of the test subject based on the search response times measured by the time counter;

wherein the image control means includes:

a function for controlling the display means to erase a target from the screen when the target is pointed in a correct order, and to display a dummy target having a different color at the position of the target in place of the target that has been erased;

a function for controlling the display means to erase a target from the screen when the target is pointed in a correct order, and to display a dummy target at random positions in place of the target that has been erased;

a function for controlling the display means to erase a target from the screen when the target has been pointed in a correct order, and to display a dummy target at random positions in place of the target that has been erased, while controlling the display means to display each target and dummy target by changing their display positions; and

a selection means for making any one of the functions effective, wherein the mentation age of the test subject's brain is calculated by the processing means based on the search response time measured by the time counter in a test using each function.

22. (Cancel)

23. (Cancel)

24. (Currently Amended) The mentation test apparatus according to Claim 16 comprising:

an image control means for executing, in a prescribed order,

a test 1 in which a given number of the targets to be pointed in a prescribed order are displayed on the screen of the display means by being randomly distributed, the test subject is requested to point each target in a prescribed order, and a dummy target having a different color from the target is displayed in place of the pointed target at the position of the pointed target when the target is pointed in a correct order;

a test 2 by controlling the display means to erase a target from the screen when the target is pointed in a correct order, and to display a dummy target on the screen at random positions in place of the target that has been erased, and

a test 3 by controlling the display means to erase a target from the screen when the target is pointed in a correct order, and to display a dummy target at random positions on the screen in place of the target that has been erased, while controlling the display means to display each target and dummy target by changing their display positions;

a processing means for calculating the degree of contraction of the search response time by a working memory for parallel processing of search and memory

of positions based on the search response time of each target measured by the time counter in each test; and

a diagnosis means for diagnosing presence of dementia or prediction probability of onset of dementia based on the calculation results.

25. (Currently Amended) The mentation test apparatus according to Claim 24, wherein the image control means allows the display means to display the search response time for each target in each test measured by the time counter after completing the entire test.

26. (Currently Amended) The mentation test apparatus according to Claim 24 or 25, wherein the image control means allows the display means to display the results of diagnosis by the diagnosis means after completing the entire test.

27. (Currently Amended) The mentation test apparatus according to Claim 16 further comprising a printer for printing test results.